

ABSTRACT

A nitrogen-containing thermoelectric material, which has an element composition represented by:



(wherein M represents a transition element; R represents a rare earth element; D represents at least one element selected from elements of the Group IV or II; $0 \leq z \leq 0.7$, $0 \leq y \leq 0.7$, $0.2 \leq x \leq 1.0$, $0 \leq u \leq 0.7$, $0 \leq v \leq 0.05$, $0.9 \leq s+t \leq 1.7$, $0.4 \leq s \leq 1.2$, $0 \leq w \leq 0.2$, and $0.9 \leq m \leq 1.1$; and $x+y+z = 1$), and has an absolute value of a Seebeck coefficient of $40 \mu\text{V/K}$ or more at a temperature of 100°C or more. These thermoelectric materials comprise elements having low toxicity, are excellent in a heat resistance, a chemical resistance and the like, and have a high thermoelectric transforming efficiency.